



Notes from an Ethiopia virtual stakeholder consultation
on a proposed One CGIAR initiative on Sustainable
Animal Productivity for Livelihoods, Nutrition and
Gender inclusion, 13 July 2021

August 2021


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Compiled by Judy Kimni and Joyce Wanderi

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Background and objectives

To implement its 2030 [research and innovation strategy](#), the CGIAR is developing a [series of initiatives](#) designed to achieve a world with sustainable and resilient food, land, and water systems that deliver more diverse, healthy, safe, sufficient, and affordable diets, and ensure improved livelihoods and greater social equality, within planetary and regional environmental boundaries.

CGIAR Initiatives are major, prioritized areas of investment that bring capacity from within and beyond CGIAR to bear on well-defined, major challenges.

Sustainable Animal Productivity for Livelihoods, Nutrition and Gender inclusion is the focus of an initiative being developed by ILRI, ICARDA and other partners.

Still at an early stage, this initiative aims to enable one million livestock producers – especially women and youth - in 6 countries to engage in inclusive value chains and achieve sustainable productivity gains resulting in improved livelihoods.

Given the importance of livestock in the lives and livelihoods of its people and the commitment of public and private actors to transform food systems through livestock, Ethiopia is one of six countries identified as a potential partner country for this initiative. To ‘ground’ and improve the proposed initiative, this meeting was convened to guide the initiative design team as they formulate the key interventions and work packages to be delivered. Specifically, to improve the current proposal outline by:

1. specifying which elements and work packages are highest priority for Ethiopia;
2. identifying missing elements that must be included for it to best serve Ethiopia’s situation;
3. providing feedback to strengthen the proposed approach and framework;
4. identifying the interests of key national actors in different work packages.

Feedback on the overall proposal

Strengths of the proposal

- Water considerations are included-but need to see how we will collaborate with partners on the ground
- Focus on sustainability and livelihoods
- A good number of beneficiaries
- Research issues on processes of AI systems - what could be an effective system to put in place to reach the necessary farmers
- Nutrition - production of milk and eggs is very important. The growing culture of consuming animal protein.
- Strong focus on internal feed production possibilities.
- Dairy sector consideration is a strong point. Pure dairy cattle are less than 2% of total local livestock share improving that will be good in improving the number of dairies
- Feed improvement is very important. Promoting forages will be very crucial.
- Partner engagement and looking for more partnerships for better scale-up
- Building on the identified priorities/ongoing work. Not starting from scratch.
- Initiative supports 10 yr strategy of MoA and aligns with it. Issues of productivity of livestock got high attention
- It addresses the entire VC, not just genetics/feed like previous initiatives
- With a cluster system, opportunity to upscale later to other regions
- Old approach was piecemeal (feed/genetics/health) but this is a full technology packaging that will be scaled up
- Scaling element within SAPLING-to ensure the impact is greater, not just die out after pilot.
- Need more investments in livestock and these approaches that are working directly with farmers are needed, hence this additional project is a great initiative
- The project is in line with exiting government plans
- Being in one CGIAR will aid in pooling human capacity for implementation of the packages/project components

Limitations of the proposal

- Put infrastructure in the place where feeds are being produced
- Better education on consumers for better diet - who would do that?
- Gap on the technical capacity of AI technicians - improve that. Facility problems on nitrogen production - train farmers on accurately detecting heat for timely AI (taking on time to AI technician).
- Clarify if the focus is on research or development? What is the scaling strategy? Need to clarify the scaling strategy
- For dairy, a duration of 3 years as a time to produce high productive cows, maybe too ambitious
- Feed is very critical. The available feed cannot be used efficiently. Ploughing and traction activities. Introduce an efficient tracking system. The available feed is given to oxen and unproductive animals
- 19 litres of milk is quite a difference - lots of limitations in production issues. Raw material prices, managing imports and exports. Intensify the producers to produce big quantities to

satisfy the demand in the country. Support policymakers and consult with policymakers - for decisions on exports and what to remain the country

- Role of engagement of national institutions not indicated. Scaling with working packages - real volume of work. modality of SAPLING - how scaling will be done - a lot of investment and money involved
- SAPLING - focus on income generation. Creating wealth for the youth group - un-employment for the youth. Animals with shorter - chicken and small ruminant.
- One region does not seem to be integrated. AA has huge potential for dairy/poultry, better to include those 2 regions
- I recommend poultry and dairy in different sectors/clusters. If the effort is scattered, the impact will be limited. Areas are important for poultry, others for dairy. better to follow a cluster approach
- Intervention relies on land availability for dairy/poultry. Land use is a critical constraint. Lack of supporting land-use policy for livestock activities
- Degree of participation of the private sector? hard to link small farmers to markets. Will it bring profit?
- Extension system has a 1 size fits all approach that does not work for LS. Need for ES to accommodate AgroEcology, resources, comparative advantage.
- Its a little bit ambitious in the outcomes listed - they may be a little difficult to achieve
- List partners clearly with the anticipated roles for each - the Ethiopian partners
- May be difficult to see limitations now - but there is too much ambition in improving production and productivity
- The gender balance target at 50% may not be realistic.

Priority locations for the proposal in Ethiopia

- Dairy - more productive animals. Target on high producing animals with the appropriate package - feed, health and market. How to increase the proportion of productive animals
- Lay down the groundwork for the approach of high producing animals - how to produce 50% dairy genetics
- Improving AI - increasing productive crossbreed animals. Building capacity of technicians, improve facilities available for AI. Improve production of nitrogen, help in facilities having more nitrogen. Use irrigate forages –
- Improve the efficiency of AI use - for genetic improvement. Producing more than 50% cross-breeds, appropriate animal taking care
- AI - more of development aspect - promote and implement it properly. The capacity of - liquid nitrogen and technicians. Work of Ministry of Agriculture.
- Feed production and marketing must be addressed and given priority.
- Produce 50% high breeds. AI accompanied by appropriate management technics.
- additional regions could be added: the pastoral system for small ruminants needs to be addressed (Somali, Afar, South). AA for dairy/poultry, Sidama for dairy/poultry/small ruminants
- Look into the rural areas and peri-urban areas rather than focus on the conventional way of identifying locations
- Need to build on work that has been going on in existing regions even as a guide in identifying new regions
- Sidama region

Suggestions on interventions and work packages

TOP priority interventions

- Get more high producing dairy animals (50% crossbred), supported by the package (feed, health)- through more efficient AI systems
- Improve feed availability for milk and meat animals, by reducing animals for traction. How to reduce feed costs???
- Improve AI systems including technical capacity for AI technicians, availability of nitrogen, heat detection- not too much research, more about capacity
- Better forages, promoting forages and fodder markets; small scale irrigation for forage production
- Ensure that livestock provides employment opportunities- e.g chicken farming
- Understanding why scaling is slow, low engagement of private sector?
- Research on extension systems, based on best practices
- Policy briefings
- Electricity, telecommunication institutions are all critical to the success of the initiative. (infrastructure, supporting tech) make VC more competitive
- Input production is a major bottleneck, we should add input production (captured in WP-4)
- Herd health, focus on younger stock mortality
- Improving input and services related to genetics. improving herd and flock productivity. total number of LS should be reduced/not sustainable
- Feed is a priority. animals are currently underfed, feeding technologies crucial
- Digital solutions are important for sector development. The country is under Ethiopia 2025 strategy on digitalization
- Need for PPPs-engaging PPP into this initiative to incorporate all key stakeholders. + synergy
- Improving the husbandry system; reduce free grazing
- Association feed/poultry/dairy-institutional development and strengthening of these associations. (breeders associations, market, etc)
- Capacity development on all levels

Priority work packages

- Equity/Inclusion? Gender be included as a transformative approach to gender-related constraints. Women and youth empowerment
- Financial policy will enable youth/women to participate, cross-cutting. (automated machines could spur women's engagement)
- WP 2-LS product safety and packaging
- Work package 1 - Food and nutrition good practices should be a cross-cutting activity in package 1, addressing One health and biosecurity issue across the value chain.
- Work package 2 - food and nutrition security is a broader outcome hence can focus on promoting a balance in behaviour change given the tradeoffs between more marketing/commercialization versus nutrition of the households
- Work package 3 - work packages 4 and 5 appear more of a strategy to implement the others and may need some finetuning and need to be made more explicit in terms of what they handle exactly.

Priority value chains

- Dairy is a good choice!
- Scaling - link to private entrepreneurs. Protein source foods price is doubling because of feed cost.
- Extension approach - research brings efficient processes from other countries - introduce them. Behaviour change of farmers.
- Should beef be included? People who have prioritized might not have looked at that.
- New dams and aquaculture, issue of fisheries getting huge attention. Can fish be added? Pb: only WorldFish works on fish, ILRI/ICARDA have no experience. But signal interest WF
- What about camels for pastoralists? Milk/meat/income
- There exists the private sector actors in feeds but they can be engaged
- Dairy, chicken sheep and goat are important but given domestic demand and Ethiopia's comparative advantage for export, there is a need to consider fattening - the cow-calf beef type of approach would be a big advantage for the communities, - Women and youth can be engaged to enhance their income and contribute to national growth as well
- Poultry value chain - layers and broilers - layers are more pronounced - but it can be retained as is - poultry value chain
- Feed is critical – it can be considered as a separate value chain to help/enhance overall value chains performance.

Chat feedback: Why livestock matter

- Asrat Tera: because it is a livelihood
- Berhanu Admassu: means of survival
- Fekede Feyissa: Because it is expected to contribute to livelihoods
- Isabelle Baltenweck to Everyone: producing milk, eggs and meat.. and manure for the soil!
- Siboniso Moyo: For nutrition, livelihoods, income
- Habtamu Yesigat: food, draft animal, asset (saving),
- Barbara Rischkowsky ICARDA: livestock is the basis for the livelihoods of many people and an important contribution to healthy diets
- Fekede Feyissa: Farm power
- Sileshi Bekele to Everyone: Why livestock matter for Ethiopia- For all economic & social life...job creation, nutrition...
- Daniel Temesgen: very Near to the people
- Berhanu Belay: Capital accumulation
- Mourad Rekik to Everyone: Can someone imagine agriculture in Ethiopia without livestock. A huge sector
- Tadele Mirkena to Everyone: It is a means of livelihood to more than 90% of the people directly or indirectly and it is the basis of agriculture.
- Kebede Habtegiorgis: Because it is a source of food for many
- Okeyo Mwai, ILRI Nairobi: Because Livestock contributes to millions of Ethiopian's livelihoods, in terms of animal source foods, farm power, income and foreign exchange earner

Chat feedback – during the presentation

- Fekede Feyissa to Everyone: How the "one CGIAR" system will affect performance/operation of the CGIAR as compared to the past???
- Isabelle Baltenweck: the objective is to streamline operations and help researchers from different centres work more easily with each other
- Isabelle Baltenweck to Everyone: as Barbara is just saying, there will be more details provided at a later date.
- Aynalem Haile, ICARDA: As Barbara is saying we also reform the organizational structure to make us effective in the delivery of technologies and be cost-effective
- Tadele Mirkena to Everyone: WP4 & 5 look more of a strategy rather than a work package.
- Asrat Tera: Please don't forget Sidama region with huge potential
- Fekede Feyissa to Everyone: What was in the master plan has now been replaced by the "10 years perspective plan". So, reference should be made to this??
- Asrat Tera: That is a path for sustainability
- Sileshi Bekele to Everyone: What about job creation innervations?
- Aynalem Haile, ICARDA: Thanks Fekede. I borrowed the info from the master plan. Is the 10 year plan available for public
- Fekede Feyissa: We should make sure that we will be referring to and contribute to the livestock development targets planned for the coming 10 years

Chat feedback: Advice for the team is

- Fekede Feyissa: Refer to the 10 years perspective livestock development plan and align the initiative
- Siboniso Moyo to Everyone: Clarify roles and responsibilities from the beginning.

- Getnet Assefa: Work on Behavioural change
- Daniel Temesgen: be innovative
- Asrat Tera: synergy
- Berhanu Belay: Reveal Livestock is an employment opportunity through collaboration
- Yohannes Girma: Stakeholder management
- Tadele Mirkena: Focus on biosecurity to ensure One Health whatever the commodity
- Mourad Rekik: think about all the system actors
- Edmealem Shitaye: Focus on specific commodity
- Okeyo Mwai, ILRI Nairobi: Keep fully engaged at all stages
- Mengistu Woldehanna: persuading farmers
- Yohannes Girma: Alignment with the MOA 10 years perspective plan

Meeting Participants

1. Asrat Tera: NAGII
2. Aynalem Haile, ICARDA
3. Tadele Mirkena, FAO
4. Isabelle Baltenweck, International Livestock Research Institute Nairobi
5. Daniel Temesgen Ethiopian society of Animal production ESAP
6. Wondmeneh Esatu, ILRI
7. Siboniso Moyo, ILRI Ethiopia.
8. Gebregziabher, G, ILRI
9. Berhanu Admassu, YAZERBER Animal Production Center
10. Barbara Rischkowsky, ICARDA
11. Louise Sarant, ICARDA
12. Mourad Rekik, ICARDA
13. Berhane, Ethiochicken
14. Okeyo Mwai, ILRI Nairobi
15. Tesfu F. Tujuba, EBI
16. Getnet Assefa, Land O'Lakes
17. Sileshi Bekele, Director, Rural Job Opportunity Creation, MoA
18. Fekede Feyissa, EIAR
19. Habtamu Yesigat, Director of Programs, Precision Development
20. Kebede Habtegiorgis, Areka Agricultural Research Centre
21. Mengistu Woldehanna, Precision Agriculture for Development

Sustainable Animal Productivity for Livelihoods, Nutrition and Gender inclusion (SAPLING)

Isabelle Baltenweck
Mourad Rekik

National Stakeholders' Consultations
July 2021



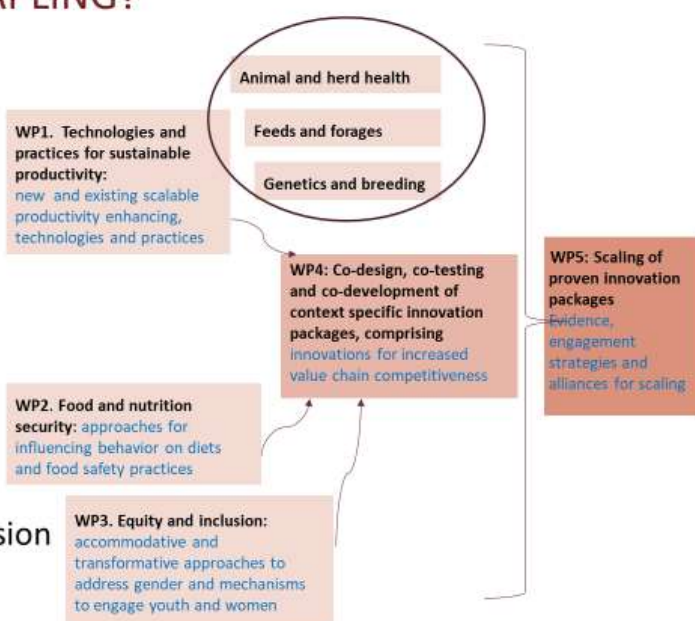
Objective statement

SAPLING aims to enable one million livestock producers, 50% women, in 6 countries to engage in inclusive value chains and achieve sustainable productivity gains between 30-50%, resulting in improved livelihoods

- SAPLING aims to fill critical **productivity** and **value-chain competitiveness gaps** by developing a pipeline of new and existing **demand-driven and co-delivering health, genetics, feed, and market systems innovations**, including climate-smart and digital solutions.
- We aim to work in 4 countries with quick wins for scaling (Ethiopia, Tanzania, Uganda and Vietnam), and 2 countries where relationships will be built and packages co-created to achieve intermediate outcomes by 2024 (Mali and Nepal)
- **7 value chains** with high potential for small- and medium- scale producers to capture market growth: dairy (including buffaloes), beef, sheep, goats, poultry- eggs, poultry- meat, and pig. We anticipate targeting more than one value chain in each country

What is SAPLING?

- Sustainable
- Animal
- Productivity
- Livelihoods
- Nutrition
- Gender inclusion



Links with other Initiatives

LCCR: Livestock, Climate Change and Resilience

OneHealth: herd health

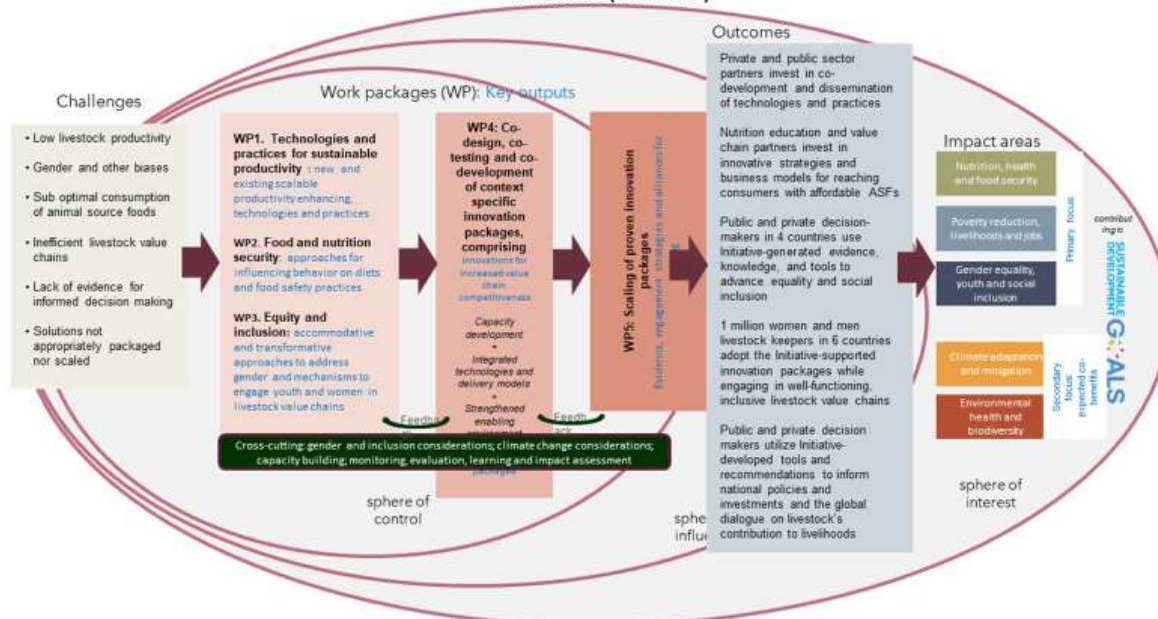
Sustainable intensification : technologies and market innovations

Excellence in breeding: feed traits (forages) and genomic selection

Focus on the work packages

WP1 Technologies and Practices for Sustainable Productivity	With “next user” delivery partners: Develop, adapt, test, demonstrate, and pilot new and existing productivity enhancing, climate-smart, scalable technologies and practices including improved feeds, forages and dual-purpose crops, novel animal health products, herd health packages, improved genetics, improved husbandry, and cross-cutting solutions for environmental sustainability.
WP2 Food and Nutrition Security	Generate evidence on effectiveness of approaches to strengthen the role of ASFs in diets and to reduce social barriers to sub-optimal consumption. Develop and test practices for safe production and appropriate handling of ASFs along livestock value chains. Co-create innovative models to deliver affordable, safe ASFs to consumers.
WP3 Equity and Inclusion	Design and test accommodative and transformative approaches addressing gender- and youth-related constraints (accessing, benefiting, and controlling opportunities and resources) throughout the livestock market system and at the household level. Design and test women- and youth- demanded innovations that provide opportunities and capabilities to engage in competitive livestock value chains.
WP4 Innovation Packages for Value Chain Competitiveness	Generate evidence on innovation packages across sites and value chains. Prioritize innovations at the farm, value chain and landscape level via trade-off analysis. Co-create gender and youth inclusive innovation packages that include technologies/practices, veterinary/diagnostic services, input, extension and service delivery mechanisms, farmer and SME finance and insurance, and market information and output marketing systems.
WP5 Evidence, Decisions and Scaling	Provide compelling scientific evidence and tools that feed into co-delivery of technologies/practices, business-models and policies that will sustainably improve livelihoods. Synthesize evidence and develop communication and engagement strategies to disseminate and advocate for increased investments and better policies at country level and globally.

Theory of change for Sustainable Animal Productivity for Livelihoods, Nutrition and Gender inclusion (SAPLING)

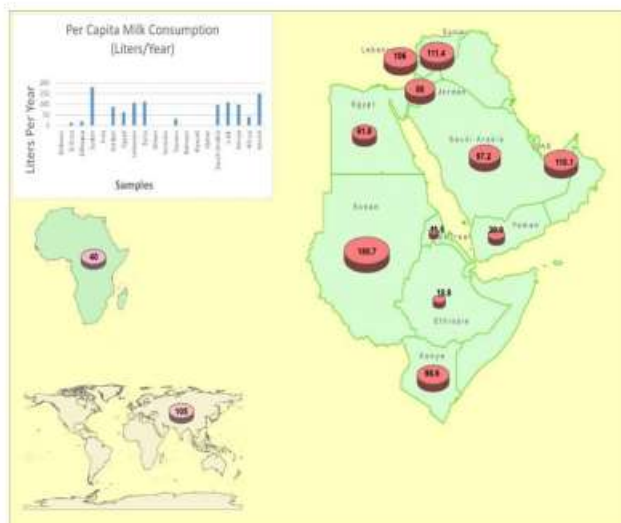


What SAPLING could mean for Ethiopia

A. Haile (ICARDA), G. Gebreyohannes (ILRI), W. Esatu (ILRI)

Some facts: Per capita milk and meat consumption (kg/year)

Country	Milk	Meat
Developed countries	217.0	95.7
• Finland	361.2	67.4
• Sweden	355.9	76.1
• Netherlands	320.2	89.3
Developing countries	55.0	31.6
Sudan	180.7	21.0
Kenya	120.0	14.3
Tanzania	42.0	10.0
Sub Saharan Africa	31.0	10.9
Ethiopia	19.0	7.9

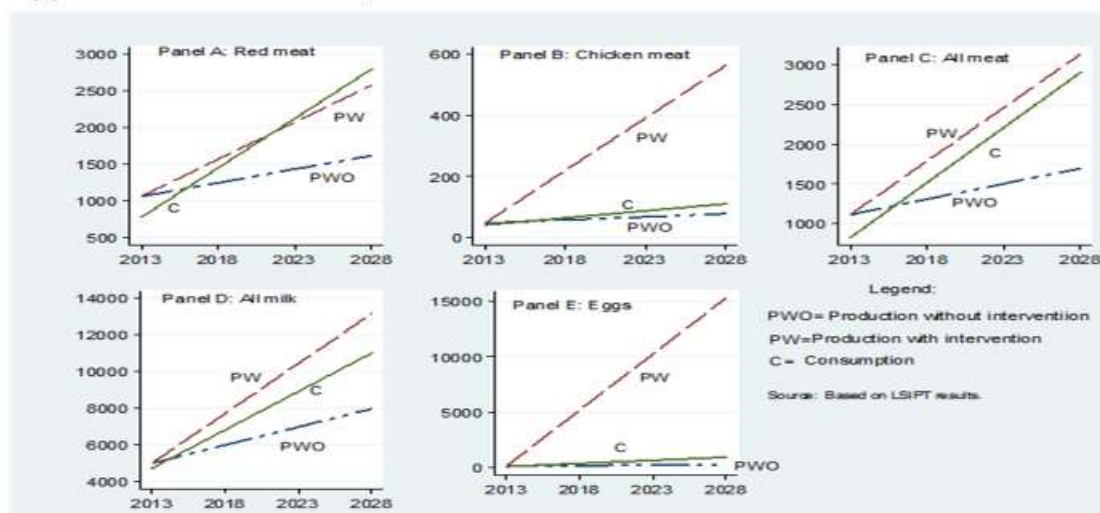


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Source: FAOSTAT

Demand and supply projections for red meat, chicken meat, milk and eggs from 2013 to 2028, with and without investment interventions



Source: Shapiro et al., 2017

Projections to 2028

Due to exploding demand due to rapid increases in population growth to 127 million people and rising per capita income:

- **Red meat consumption will grow by about 276%** from 775,000 tons in 2013 to 2.9 million tons, with an average annual consumption of 24.5 kg per year. Meat deficit of about 1.3 million, 53% MT
- **Milk consumption will grow by 127%** from 5 billion liters in 2013 to 11 billion liters.
- **Domestic milk production expected to cover more than 71%** of the total consumption requirement representing a production-consumption gap of 3.2 billion liters. Milk deficit of about 3,185 million litres, 29% of milk in 2028.

GTP2 Performance: Re-orienting Livestock Production to Meet Quality Requirements of the High-end domestic and Export Markets

The current situation

1. Live animal export

GTP II – 1.2million animals/474 million USD/annum

Performance- 67million USD/2017 **(14%)**

1. Meat export

GTP II - 92 000 tone/500 million USD/year

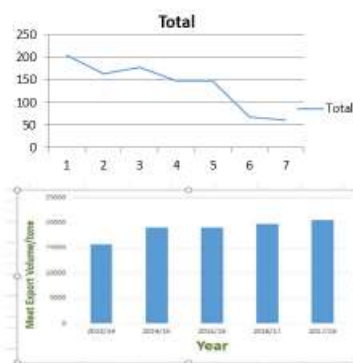
Performance – 21000 tone-2017/101 m USD) **(20%)**

Why low performance?

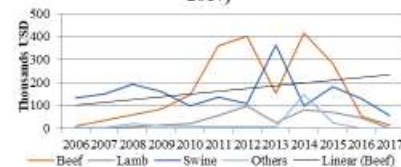
- SPS
- Low throughput from the source
- **Quality** (the market requires tender, juicy and less fat meat ~ eg for cattle 320 kg at 24 months/ **currently > 4yrs**)

Interventions proposed

- **At source** (strategic feeding health interventions and genetics)
- **At feedlot** (improving feeding efficiency and strengthening bio-security)
- Interventions are proven to be **financially viable**



1.3. Imports of meat types (2006-mid, 2017)



SAPLING – what is on offer



Technologies and Practices for Sustainable Productivity

Improved cattle, SR, chicken genetics integrated with ICT, genomic and reproductive tools

Forage and multi-purpose crop breeding, improv. of crop residues, off farm feed production, fattening technologies

Platform for delivery of improved genetics (synchronization, AI, Sire certification)

Digital farmer support system to promote herd health, vaccine platform to develop candidate vaccines

Food and Nutrition Security

Practices for safe production and handling of ASFs

Increased affordability and safety

Behavioral change strategies for increased ASF consumption

Equity and Inclusion

Gender transformative approaches

Empow. marginalized groups, women

Value chain competitiveness

Access to services

Input/output markets

Intervention packages

Business models

Scaling

Scaling framework

communication and engagement strategies

Decision support tools

Proposed choice of commodity VCs and geographical regions



ACGG sites (Oromia, SNNP, Amhara, Tigray and Addis Ababa regions), with possibility of scaling to other regions



ADGG sites (Oromia, SNNP, Amhara, Tigray and Addis Ababa regions), with possibility of scaling to other regions



Small ruminant VC sites (Menz, Bonga, Horro, Doyogena, Abergelle, Konso) with possibility of scaling to other regions



More thoughts

- Builds on existing initiatives
 - SR value chain
 - ACGG
 - ADGG
 - Gives us the opportunity to continue our successful work
- Closely work with different partners
- Opportunity to take some of the innovations to scale
- Capacity development at different stages
- Spillover effect from other countries because SAPLING will be implemented in six countries

